ABSTRACT OF THE DISCLOSURE

A motor vehicle steering system includes a yaw rate controller that continuously detects a yaw rate representing the vehicle yawing motion, forms a control signal as a function thereof, and causes a steering movement that counteracts the undesired yawing motion. The control signal is formed differently in the unbraked driving condition than when the vehicle is braked. In addition, the control signal in the case of a control intervention of a brake control system may be formed differently than when the vehicle is braked without such a control intervention. Preferably, the control signal which is determined from the deviation between a desired yaw rate value and the actual yaw rate value, in the case of a controlled braking operation, is formed by means of at least one other amplification factor (k_p) that differs from that which is used in the unbraked driving condition. In the deviation branch, in addition to the proportional fraction, an integral fraction may be provided whose amplification factor (k_I) in the case of a braking operation has a different value than in the unbraked driving condition.